

REMARKS/ARGUMENTS

Claims 1-32 are pending. Claim 28 has been amended. New claims 31-32 have been added. The amended and new claims are supported by the specification. No new matter has been added in the amended or new claims.

Claim Rejections - 35 U.S.C. § 102

Claims 1-30 were rejected under 35 U.S.C. § 102(e) as being unpatentable over U.S. patent number 6,195,556 to Reudink *et al.*, hereinafter Reudink. Reconsideration of the rejection and allowance of the claims are respectfully requested for the following reasons.

Claims 1-14

Claim 1 recites, in part, “performing a comparison of the first location information to the parameter information [and] based on said comparison, selectively obtaining second location information regarding said mobile unit.” The applicant respectfully submits that the cited reference does not teach or suggest at least this element of claim 1.

An embodiment of the present invention is directed to “allowing for more efficient use of resources for providing location information where multiple sources of such information may be available.” (Specification at page 3, lines 16-18). “Invoking different location sources often entails consumption of different resources.” (Specification at page 4, lines 14-15). Thus, one embodiment of the present invention initially uses a first source of location information that places a minimal burden on system resources and/or involves a short lag time. In some cases, these low burden information sources provide location information that is of low accuracy, but sufficient for a given application.

“The location information from the first source may also be used to determine not only if, but when the second source is invoked.” Thus, a second source of location information, sometimes entailing a higher burden on system resources or longer lag times, may be subsequently invoked when a determination is made that more accurate location information is necessary. (Specification at page 6, lines 1-5). “In this manner, the benefits of using a more

accurate source of location information can be achieved without unnecessarily invoking such a source when lower resource or a faster response time information yields sufficient information for the purposes of the application under consideration." (Specification at page 25, lines 26-30). Accordingly, claim 1 recites, in part, "performing a comparison of the first location information to the parameter information [and] based on said comparison, selectively obtaining second location information regarding said mobile unit."

Reudink discusses using one or more base transceiver stations (BTS) to provide location information regarding a mobile unit. In some cases, such as in a rural area with limited cellular coverage, multiple narrow beams from a single base station are used to provide location information using only one BTS. (Reudink at col. 7, lines 9-57). To provide more precise location information, when the mobile unit is within the coverage area of more than one BTS, two or three BTSs may be used in providing location information. (Reudink at col. 9, lines 31-45). Therefore, Reudink discusses that "a method providing less accuracy, but providing a hasty determination, may initially be used. Thereafter, a method providing greater accuracy, but a delayed determination, may be used to pinpoint the mobile unit's position." (Reudink at col. 11, lines 38-41).

Nowhere does Reudink teach or suggest performing a comparison of the first location information to the parameter information [and] based on said comparison, selectively obtaining second location information regarding said mobile unit, as recited by claim 1. Thus, the cited reference does not provide the benefits available through embodiments of the present invention. Reudink appears to discuss a system that can provide location information having different levels of accuracy depending on the number of BTSs used, but not a system that can selectively obtain more accurate location information. Therefore, Reudink does not provide the benefits of the present invention, such as the capability of conserving resources when the first source of information using lower levels of system resources or a faster response time is sufficient for the purposes of the application under consideration. For at least these reasons, claim 1 is allowable over the cited reference.

Claims 2-14, are dependent on claim 1 and should be allowable for at least similar reasons as discussed for claim 1 above. Furthermore, claims 2-14 recite additional limitations and should be allowable for these additional reasons.

Claims 15-18

Claim 15 recites “performing a comparison to determine whether a location of said mobile unit as indicated by said monitored information satisfies a defined relationship relative to stored location information; [and] based on said comparison, selectively obtaining second location information regarding said mobile unit from at least a second source different than said first source.” The applicant respectfully submits that the cited reference does not teach or suggest at least this element of claim 15.

As discussed in relation to claim 1, Reudink does not teach or suggest the steps of performing a comparison and based on the comparison, selectively obtaining second location information. Reudink only discusses obtaining location information with varying levels of accuracy, not selectively obtaining second location information based on a comparison step. Therefore, Reudink does not provide the benefit or capability of conserving system resources as in the present invention. For at least these reasons, claim 15 is allowable over the cited reference.

Claims 16-18, are dependent on claim 15 and should be allowable for at least similar reasons as discussed for claim 15 above. Furthermore, claims 16-18 recite additional limitations and should be allowable for these additional reasons.

Claims 19-23

Claim 19 recites, “performing a comparison of the first location information to the parameter information; [and] based on said comparison, selectively obtaining second location information.” The applicant respectfully submits that the cited reference does not teach or suggest at least this element of claim 19.

As discussed in relation to claim 1, Reudink does not teach or suggest the steps of performing a comparison and based on the comparison, selectively obtaining second location

information. Therefore, Reudink does not provide the benefit or capability of conserving system resources as in the present invention. For at least these reasons, claim 19 is allowable over the cited reference.

Claims 20-23, are dependent on claim 19 and should be allowable for at least similar reasons as discussed for claim 19 above. Furthermore, claims 20-23 recite additional limitations and should be allowable for these additional reasons.

Claims 24-27

Claim 24 recites, in part, “receiving a first indication of a location of said first mobile unit at a first time; and based on said first information regarding said location of interest and said first indication regarding said first location of said first mobile unit at said first time, determining a timing for obtaining a second indication of a second location of said first mobile unit.” The applicant respectfully submits that the cited reference does not teach or suggest at least this element of claim 24.

As discussed above, Reudink appears to discuss using lower accuracy methods to obtain location information that may be followed by higher accuracy methods to “pinpoint the mobile unit’s position.” (Reudink at col. 11, lines 35-41). “Moreover, multiple determinations as to a mobile unit’s location may be made by the present invention. For example, the method used to make an initial location determination may be repeated at a certain time interval to confirm the initial determination.” (Reudink at col. 11, lines 42-47, emphasis added). However, none of these sequential methods of location determination teach or suggest determining a timing for obtaining a second indication of a second location based on the first information regarding the location of interest, as recited by claim 24. On the contrary, Reudink appears to discuss determining the “certain time interval” prior to obtaining the first location information, not based on the first information. For at least these reasons, claim 24 is allowable over the cited reference.

Claims 25-27, are dependent on claim 24 and should be allowable for at least similar reasons as discussed for claim 24 above. Furthermore, claims 25-27 recite additional limitations and should be allowable for these additional reasons.

Claims 28-30

Amended claim 28 recites, in part, “providing an interface for use in obtaining location information from a first source and a second source, said first source having a first quality of service characteristic and said second source having a second quality of service characteristic; utilizing said first source to perform a first location operation to locate a first mobile unit; determining a required quality of service for said first location operation; and based on said required quality of service, selectively using said interface to obtain said location information from said second source.” The applicant respectfully submits that the cited reference does not teach or suggest at least this element of claim 28.

Reudink does not teach or suggest the steps of utilizing said first source to perform a first location operation to locate a first mobile unit, determining a required quality of service for said first location operation, and based on said required quality of service, selectively using said interface to obtain said location information from said second source. For example, Reudink provides no disclosure of selectively obtaining information from the second source based on the required quality of service. On the contrary, Reudink only appears to discuss that location information of varying accuracy may be obtained by making multiple determinations as to a mobile unit’s location. (Reudink at col. 11, lines 42-47).

Accordingly, Reudink fails to provide the benefits available through embodiments of the present invention as described above, including the capability of conserving system resources without unnecessarily invoking the second source when the first source yields sufficient information for the purposes of the application under consideration. For at least these reasons, claim 28 is allowable over the cited reference.

Claims 29-30, are dependent on claim 28 and should be allowable for at least similar reasons as discussed for claim 28 above. Furthermore, claims 29-30 recite additional limitations and should be allowable for these additional reasons.

Claims 31-32

New claims 31-32 have been added to more specifically claim the present invention.

Appl. No. 10/071,116
Amdt. dated November 3, 2004
Reply to Office Action of September 17, 2004

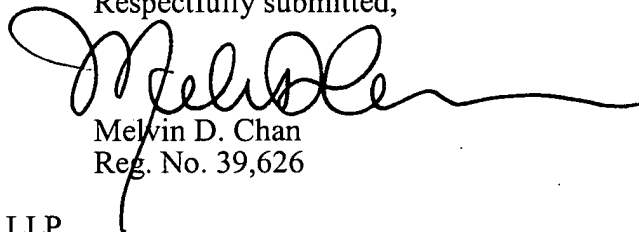
PATENT

CONCLUSION

In view of the foregoing, applicants believe all claims now pending in this application are in condition for allowance. The issuance of a formal notice of allowance at an early date is respectfully requested.

If the examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400, extension 5213.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Melvin D. Chan', with a long horizontal flourish extending to the right.

Melvin D. Chan
Reg. No. 39,626

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 650-326-2400
Fax: 415-576-0300
MDC:CCL:km
60341788 v1